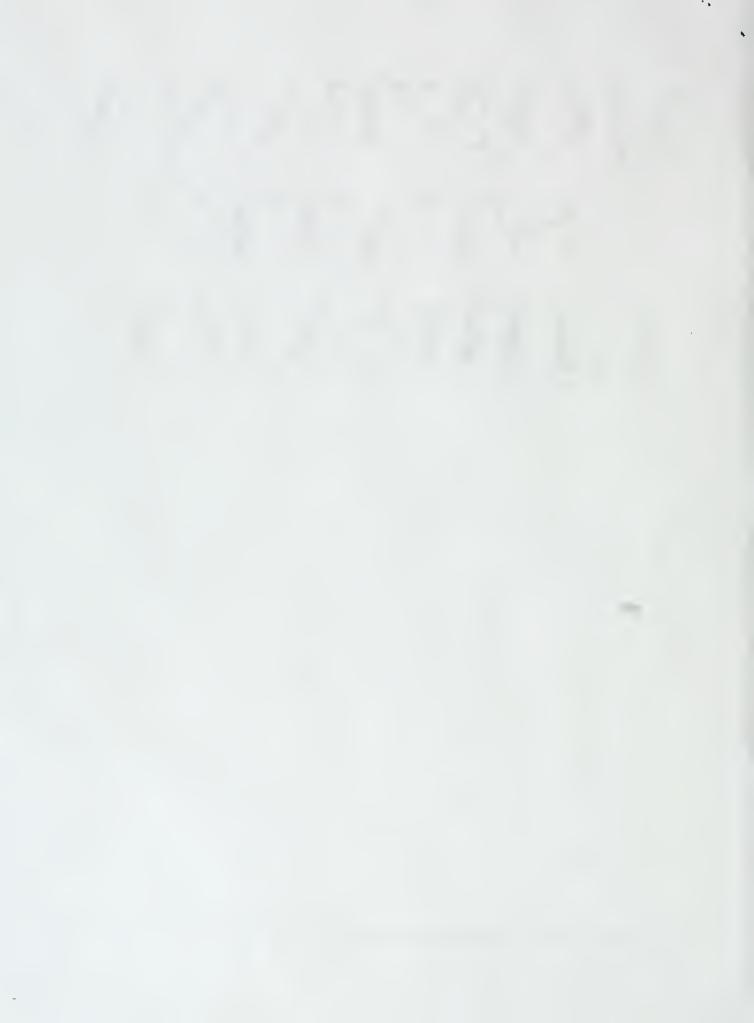
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EWSEVIEWS September 1998

A NEWSLETTER DEDICATED TO INFORMATION TECHNOLOGY IN THE STATE OF MONTANA

STATE DOCUMENTS COLLECTION

GIS - What is it?

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n more and more agencies of State Government, the term GIS, or Geographic Information Systems, is heard up and down the hallways. Because it is often rumored to be synonymous with money (expenditures), many managers may prefer to stand clear of the discussion. Others immediately plug their ears because it might have something to do with geography. In a world where 70 to 80 percent of the decisions made by government have a spatial (geographic) component, GIS is becoming an important tool to assist in those decisions. This article will attempt to define GIS, examine some of the benefits that accrue upon implementation, and find out what is happening on the GIS scene in Montana.

The Montana State Library defines a GIS as:

GIS is a computer system for assembling, storing, manipulating, and displaying data which contains physical locations (geographic coordinates) of features and information about those features (attribute data). An example GIS database is the location of all known active and inactive mines in Montana and attribute data about the types of commodities produced by the mines. An example of a type of analysis performed using GIS capabilities is proximity analysis, examining how one set of

features relates to another. For example, the mine database above could be analyzed in conjunction with a database of stream locations. Some questions the GIS could answer would be: Which copper mines are located within one mile of a stream? Or which stream segments have 10 or more mines

within 500 meters? **> 2**

GIS technology can be used for scientific investigations, resource management and development

planning. For example, a GIS might allow emergency planners to easily calculate emergency response times in the event of a natural disaster, or a GIS might be used to find wetlands that need protection from pollution. It might just as easily be used to find out why a particular area has a high incidence of cancer or heart disease or why a higher percentage of worker's compensation cases come from a particular area.

Is GIS cost effective? A recent investigation (still a draft) by the Montana Geographic Information Council (MGIC) compiled the following data:

"...two types of benefits (can be) derived from a GIS: (1) efficiency and (2) effectiveness benefits. Efficiency benefits arise when a GIS is used to reduce the costs of a task that, in the absence of a GIS, would be handled by some other method. Effectiveness benefits arise when GIS is used to perform a task that could not or would not be done without a GIS (Gillespie, 1994*).

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Published by Information Services Division



The Gillespie (1997) regression model was used to measure economic benefits for a number of case studies of GIS implementation by state and local government agencies in Montana. The Gillespie (1997) model predicted B/C (benefit to cost) ratios ranging between 1.2-5.6 for case studies producing effectiveness benefits. In other words for every dollar spent on running a GIS application the return on investment ranged from \$1.20 to \$5.60. The Gillespie (1997) model was only used to estimate efficiency benefits in one case study, estimating an 89% savings in Butte-Silver Bow's land records research."

In 1997, Governor Marc Racicot recognized the impact this emerging technology could have on many state agencies, as well as local, federal and private interests within the state. By executive order, he created the Montana Geographic Information Council (MGIC) to formulate policy related to GIS. The GIS Services and Coordination Section of ISD staffs the council. MGIC relies on the technical expertise of pre-existing GIS groups like the Interagency Technical Working Group (TWG) and the Montana Local Government GIS Coalition (MLGGC) to provide the technical data needed to create policy.

It has often been said that the greatest cost incurred when implementing GIS is creating and maintaining the data needed to run the applications. MGIC will attempt to foster a statewide atmosphere where public and private interests cooperate to build the most useful, cost efficient GIS databases possible. MGIC's Web site can be found at http://www.state.mt.us/isd/groups/ mgic/index.htm. If you would like more information on MGIC, GIS implementation, or related topics, please contact Stewart Kirkpatrick, the GIS Services and Coordination Manager, at 444-9013, ZIP! or e-mail at skirkpatrick@state.mt.us.

*Stephen R. Gillespie, U.S. Geological Survey "GIS Technology Benefits: Efficiency and Effectiveness Gains."





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Electronic Commerce Subcommittee

Electronic Commerce is a topic that covers a wide range of issues.

Electronic

- Data interchange (Submitting info electronically)
- Messaging (E-mail)
- Bulletin boards (BBS)
- Funds transfer (ATM usage or automatic deposit)
- **Forms**
- Catalogs (Shopping via the Internet)



Electronic commerce is receiving focus worldwide. The Information Technology Advisory Council (ITAC) created a subcommittee to study issues and to suggest actions the state as a whole should take. The main issue the subcommittee chose to deal with was the modification of existing laws that require paper documents and written signatures in state government business. These laws hinder state agencies from using new technologies to become more efficient and cost effective.

To resolve this problem, the subcommittee created draft legislation that was presented to ITAC August 19th.

For more information contact Brian Dostal of the Policy, Development, and Customer Relations Bureau at 444-0707, ZIP! or e-mail at bdostal@state.mt.us.

Calendar of Events

September

- 2 Information Technology Managers Council (ITMC), 8:30-10:30am Rm 111, Metcalf Bldg.
- 28 Public Safety Communications Council, 1-3pm, Rm 160, Mitchell Bldg.
- 30 Information Technology Advisory Council (ITAC), 8:30am-12pm, Rm 111, Metcalf Bldg.

October

Information Technology Managers Council (ITMC) 8:30-10:30am Rm 111, Metcalf Bldg.

Wireless Enhanced 9-1-1

f you are one of the 47 million Americans who carry a mobile or wireless (cell) phone in your briefcase, pocket, or car, you've probably felt a sense of security knowing that if help is needed, it is only a phone call away.

But, consider this. One of the first questions the 9-1-1 dispatcher will ask you is "What is your exact location?" If you are hiking in the country, or driving on a rural road, or even on a highway, will you be able to provide the answer? Have you ever thought about how the emergency responders would find you?

In many areas of the country, when a 9-1-1 call is received from a home or business, the dispatcher automatically receives the telephone number and the location (address) of the telephone used to make the call. Although this service, called Enhanced 9-1-1 (E9-1-1), is not yet available in most of Montana, the 1997 legislature approved additional funding to upgrade existing 9-1-1 systems to include E9-1-1.

What is being done to provide E9-1-1 information with cell phone calls?

Recently the FCC has enacted rules which require that local wireless telephone carriers be capable of locating the origin of wireless 9-1-1 calls and transmitting that information along with the call to the designated Public Safety Answering Point (PSAP). Wireless carriers are required to implement this service in 2 phases:

- Phase I: (May 1, 1998) the carrier must provide a call-back phone number and the cell site that is relaying the call.
- Phase II: (available by April 1, 2001) the carrier must provide a call-back number and the location of the calling telephone within 125 meters (accurate 67% of the time).

However, there is one caveat in the rules. The FCC will only require wireless carriers to provide this service if the PSAPs have the equipment necessary to receive the information, and there is a way for the wireless carriers to recover the costs involved for providing this service.

The technology is quickly becoming available to provide Phase I information. There have been a few successful trials involving the provision of Phase II information, although they were conducted in heavily populated areas with numerous cell sites. A trial conducted in Texas demonstrated successful transmission of location information from stationary callers within a 15 sq. mile area. Another, in New Jersey, was successful in transmitting Phase II information from moving callers along a 50 mile stretch of the I-295/New Jersey Turnpike corridor. Presently Western Wireless (Cellular One) is planning a Phase II wireless trial in the Billings area in conjunction with a company called US Wireless.



Unfortunately, the Federal Government does not provide any funding for 9-1-1 service, basic or enhanced, and Montana does not have funding available specifically for wireless E9-1-1. Therefore the new funding available for E9-1-1 in Montana must cover costs for both wireless and wireline E9-1-1. The Statewide 9-1-1 Program is researching the costs involved with providing wireless E9-1-1, and options for reimbursing the wireless providers.

For more information contact Surry Latham of the Policy, Development & Customer Relations Bureau at 444-2420, ZIP! or e-mail at slatham@state.mt.us.

YEAR 200 Progress Report

Less than 16 months are left before we enter the year 2000. We'll then observe what computer malfunctions result from decades of using abbreviated 2-digit dates (i.e. 98 rather than 1998.) ISD monitors the progress made by the State of Montana in repairing or replacing computer software systems that may not operate properly in the 21st century. More than 700 systems have been identified. Agencies analyzed these systems and prioritized them High – Medium – Low. The systems are divided equally among these priorities (high 30%, medium 30% and low 40%).

As of August 1, 1998, 264 systems were Year 2000 compliant. That leaves nearly 450 systems to go (see figure). Although agencies predicted 20 computer systems would be fixed during the month of July, only 3 systems were brought into compliance. This unfortunate slippage appears throughout the State, regardless of the priority of the systems involved.

Each month ISD provides department heads with detailed information on how their agency is progressing toward meeting their Year 2000 goals. In spite of the slippage in meeting some of the target compliance dates, many agencies believe there is good reason to be guardedly optimistic that the State of Montana will have its computer systems Year 2000 compliant before we enter the next millennium.

For more information on the Year 2000 problem, contact G. Scott Lockwood of the Policy, Development & Customer Relations Bureau at 444-2655, ZIP! or e-mail at slockwood@state.mt.us.

Year 2000 Compliance

In recent months, there has been increased awareness

of statewide computer systems Year 2000 compliance. There are specific questions about the SBAS, Warrant Writing System (WWS) and P/P/P systems and whether plans are in place to make them Year 2000 compliant with the upcoming implementation of MT PRRIME (replacing all three of these systems). The short answer to those questions is YES; all three of these systems will be Year 2000 compliant and are in the process of planning and testing.

One of the reasons for making these systems compliant is that the fail dates for the systems were prior to, or the same as, the projected implementation dates for MT PRRIME. Current schedules for Year 2000 compliance for these systems follows:

- P/P/P scheduled to complete testing and go live in October 1998.
- SBAS scheduled to begin testing August 1998 and complete testing December 1998.
- WWS scheduled to begin testing August 1998 and complete testing October 1998.
- Changes to these dates will be posted to the Year
 2000 Compliance Reporting System as they occur.

The current plan is that there won't be any changes to the interface files for current SBAS, WWS and P/P/P for Year 2000 because these systems are scheduled for replacement by MT PRRIME. Therefore, if your files look the same in your Year 2000 compliant systems as they do now they should be fine. If you need help manually checking the interface files, please contact the project leads listed below to get more information on testing.

WWS Kris Sveinson, (Mon-Wed) 444-5699 or via ZIP! SBAS Burwell Gooch, 444-2917 or via ZIP! P/P/P Thea Sperline, 444-9835 or via ZIP!



Password Techniques

ccording to the State policy entitled UserID, Password, & Access, "Each UserID must have a password associated with it.

- Passwords will be at least 6 characters long and contain at least one numeric and one alphabetic character.
- Passwords will be changed at least every 60 days.
- Passwords will not be reused for at least 4 cycles.
- Passwords will not be written down where they can be found by unauthorized personnel and should not be shared with other individuals.
- Passwords should not be obvious or easily guessed (userID, user name, address, birth date, child's name, spouse's name)

With all of these rules, it can be difficult for users to create passwords that meet criteria. There are several techniques that an employee can use to create a password to abide by policy as well as make it easy to remember. Here are some examples:

 Create a phonetic sentence using the pronounced sounds of the letters, numbers, or special characters. I10D24GET I tend to forget.

I87#2DAY I ate seven pounds today.

2. Concatenate short, unrelated words and add a number to it somewhere.

GO6CAT2SAY BLACK7AND

3. Use the first letter of each word in a poem or song until you have enough letters (e.g. at least six) and add a number or substitute a number for a letter.

JAJ4WUTH Jack and Jill went up the hill. H1NSNJA Help! I need somebody. Not just anybody.

4. Mirror a word (in either direction); repeat process or truncate letters as needed to get appropriate length and add a number to it somewhere.

JUST5TSUJ BOY7YOB7BOY

5. Take a word from the dictionary that is long enough to qualify as a password. Replace all the vowels with numbers or special characters.

Mornings psychotic

M\$RN\$NGS PS1CH1T1C

For more information regarding security policies or passwords, see http://www.state.mt.us/isd/policies/ Enterprs/idpasswd.htm or contact Lynne Pizzini, Network Security Officer, at 444-4510, ZIP! or e-mail at lpizzini@state.mt.us.

Job Scheduler Tips

ne of the new features and enhancements of Job Scheduler R504 is the Job Dependency Network Information screen. This screen is displayed when option N (Network) is specified on the Job Status screen. Information is displayed for all predecessor and successor jobs (including eventual successors and predecessors) for the selected job.

Simply log on to the Job Scheduler Main Menu from ISPF (option U.J) and select option 3 for Job Status. Then enter an "N" beside the job to be displayed and see a display of all associated jobs.

Jobs are listed in job flow order relative to the selected job. The selected job is indicated by an purple arrow, predecessor jobs by a white minus sign, and successor jobs by a yellow plus sign.

Level	Name	DueIn/Out	Elaps Late Prio P	Res Status
-3	JOB1	1158 1159	0001	Ended ok
-2	JOB2	1158 1159	0001	Ended ok
-1	JOB3	1158 1159	0001	Ended ok
Ù	JOB4	1156 1159	0003	Ended ok
+	JOB5	1158 1159	0001	Ended ok
+2	JOB6	1158 1159	0001	Ended ok
+3	JOB7	1158 1159	0001	Ended ok

This information could be useful for users to verify that the job flow for new or changed schedules is what they intended. The Network Dependency Information screen can be displayed at any time, enabling you to see the job flow before the jobs are run or after job completion.

Information on this display can also be used to quickly determine the ending status of all associated jobs, whether any jobs were late, the priority of the jobs, etc. (Note: The **Due Out** field defaults to 1 minute before "Mainday" processing, which is at noon.)

For questions or clarification, please contact Cheryl Heiner of Technical Services at 444-9616, ZIP!, or e-mail cheiner@state.mt.us.



Infopac-RDS & DocumentDirect

New releases of both Infopac-RDS (usually referred to simply as RDS) and DocumentDirect are now available from Mobius Management Systems, Inc. RDS is the automated report distribution system used on the mainframe. DocumentDirect is the Windows interface to access RDS. Mobius has changed the name of Infopac-RDS to ViewDirect for MVS with this new release. It will most likely be referred to as RDS for a long time. But, if you see references to either ViewDirect or RDS, you can be assured they are the same.

The new version of DocumentDirect (2.1) is now available and may be downloaded from the ISD Value Added Server (VAS). Instructions for the installation are located on at guest rds\instal21.doc, (Word), or at guest rds\instal21.wpd, (WordPerfect). If you do not have access to the VAS, we can send you the installation instructions via e-mail and make the software available on diskette. Before installing, be aware that it runs as a 32-bit application. If your workstation is not configured

to run 32-bit applications, you must continue to run version 1.4. The new version offers significant enhancements and new features, some of which are discussed in this article. However, not all features will be available until the new version of ViewDirect (6.1) is installed on the mainframe. The new version of Document Direct (2.1) is compatible with both the current and new ver-

If you access RDS via DocumentDirect and will not be running a 32-bit application by the installation date (~ 1/1/99) for the new version of RDS, please contact the report distribution support personnel.

sion of RDS. However, when run with the current version of RDS, some features are not available.

We would like to install ViewDirect for MVS (RDS) version 6.1 in just a few months, perhaps around the first of the year. However, there are compatibility issues that must be considered. These issues are related to the compatibility between versions of these products and also with the workstation configurations currently in use. This new version of RDS is not compatible with the current version of DocumentDirect. Therefore, any user accessing RDS via DocumentDirect must convert to the new version of DocumentDirect previous to the installation of the new version of RDS. Yet, as mentioned above, some users may not be able to run the new version of DocumentDirect on their work-

stations because they are not able to run 32-bit applications. Obviously, we're concerned about the impact on these users.

Therefore, if you access RDS via DocumentDirect and will not be running a 32-bit application by our anticipated installation date (~ 1/1/99) for the new version of RDS, please contact one of the report distribution support personnel listed below.

Some significant changes and enhancements in DocumentDirect version 2.1 include:

- Year 2000 certification by Mobius.
- Runs as a 32-bit application Takes advantage of the superior memory management, improved reliability, and multi-tasking capabilities of modern 32-bit operating systems such as Windows 95 and Windows NT.
- Annotations Attach annotations to reports. These annotations are stored on a shared server and other users of that server can then view the reports with the annotations. The types of annotations available include a freehand line, box, "sticky" note, highlight, arrow, stamp (BMP file), audio file, and others.
- Copy to clipboard This function can be used to copy and paste pages or portions of pages to other Windows applications.
- Password changes Your mainframe password may be changed from DocumentDirect. It is not necessary to log on to SuperSession just to change the password. (This feature will not be available until the new version of RDS is installed.)

Some significant changes and enhancements in ViewDirect (RDS) version 6.1 include:

- Year 2000 certification by Mobius.
- Find command enhanced The find command can be used to find the first, last, or previous occurrence of a text string.
- Performance enhancements The new version of RDS contains several enhancements which are transparent to the user and enhance the system's performance. For assistance with the installation of DocumentDirect or any aspect of report distribution, contact the Computing Operations Bureau: Dave Smith at 444-2857, ZIP! or e-mail at dasmith@state.mt.us, Jan Lewis at 444-2901, ZIP! or email at jalewis@state.mt.us or Diane Haun at 444-3336, ZIP! or e-mail at dhaun@state.mt.us.

COMPAREX - New Release - 8.2.1

OMPAREX is a multi-function database, load module and text comparison utility that automates the complex tasks of file comparison and system testing. By performing line-by-line, byte-level comparisons, COMPAREX can identify differences between any two files. COMPAREX is an essential tool for application testing, software quality assurance, and reconciliation of source code and load libraries.

The A-INDENTITY is a new keyword that works in conjunction with the IDENTITY keyword to allow multiple selection criteria on a single record. It allows a user to compare multiple logical record layouts in a file in a single pass. The A-IDENTITY keyword extends the IDENTITY keyword to include Boolean statements. COMPAREX provides the AND logic applied to the IDENTITY keyword to allow field descriptions to be associated with a more complex set of discriminators.

A new COBOL Copybook Parser Utility will provide users multiple 01 levels to be parsed. In an effort to provide a common set of interfaces, this copybook parser replaces the current parser.

Date field comparison allows users to define and compare dates in different formats for equality. For example, if the date format in one field is MMDDYY and the date format in the other field is MMDDYYY or MMDDCCYY, COMPAREX will accurately compare the two fields and highlight the differences. If century is not specified, COMPAREX will treat the year as 20th and 21st century. This feature is particularly useful when comparing the old file that has a six digit date field to the new file that has the expanded eight digit date field.

COMPAREX 8.2.1 is Year 2000 compliant. Many applications COMPAREX interacts with are not yet Year 2000 compliant. To overcome this, COMPAREX provides a solution using a fixed windowing technique. COMPAREX will examine the two-byte year. If the date is greater than 60, COMPAREX will assume a 20th century year. COMPAREX will print the corresponding four-byte year on the output report.

Online help facilities are available, or manuals may be ordered. If you have any additional questions please contact Rick Woolett of the Systems Support Bureau at 444-0779, ZIP! or e-mail at rwollett@state.mt.us or Tom Clement of the Computing Operations Bureau at 444-2881, ZIP! or e-mail at tclement@state.mt.us.

ITMC August Meeting

he Information Technology Managers Council (ITMC) meets monthly to review technology issues that affect state government. ITMC's last meeting was held August 5. The group was updated on the MT PRRIME and Exchange e-mail projects, electronic commerce and Year 2000 progress. The group also discussed assisting the Information Technology Advisory Council (ITAC) with defining support and training issues as well as the efforts of the Recruitment and Retention Subcommittee.

Minutes of the meeting are available on the ISD website at http://www.state.mt.us/isd/groups/ITMC.

For more information on ITMC, contact Wendy Wheeler of the Policy, Development and Customer Relations Bureau at 444-2856, ZIP! or e-mail at wwheeler@state.mt.us.

Computing Policy Update

n an effort to streamline and conduct business in a more effective and efficient manner, the process for adopting enterprise wide computing policies has been changed by the Department of Administration. Instead of taking up valuable time during Information Technology Managers Council (ITMC) and Information Technology Advisory Council (ITAC) meetings to discuss draft policies, they are now sent to members and interested parties through electronic mail. Each policy has a three-week question and comment period during which feedback can be given to the department.

There are currently four draft policies out for comment

http://www.state.mt.us/isd/policies/enterprs/

net040.htm An electronic mail policy dealing with the appropriate use of the state electronic mail system and contains an extensive guidelines section for users

<u>pcs010.htm</u> PC replacement cycles and outlines a four-year replacement cycle for all PCs in state government

sec010.htm Internet and intranet security.sec020.htm Network and file server security.

You can find existing Enterprise-Wide Computing Policies on the web at http://www.state.mt.us/isd/policies/policies.htm. For more information contact Audrey Hinman of the Policy, Development and Customer Relations Bureau at 444-1635, ZIP! or e-mail at ahinman@state.mt.us.

Oracle Designer/2000

Designer/2000 is a toolset for modeling, designing and generating client/server databases and database application. Designer/2000 provides a solution for developing second generation, enterprise client/server systems in addition to supporting the whole development process for a wide choice of target databases and types of applications. Client/server applications can be 100% generated using application logic and reusable module components. Designer/2000 data is stored in a central repository, enabling easy team working and project management.

Process Modeller is a Designer/2000 toolset that provides the necessary tools for modeling business processes. These are the activities in which a business

engages in order to create or add some kind of value for customers. The Process Modeller toolset comprises a graphical modeling tool. Using Process Modeller you can:

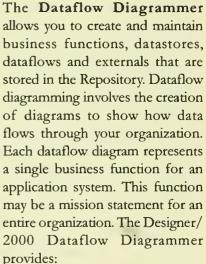
- Define the key processes used by a business
- Model any or all of these processes in detail
- Identify processes that need improvement
- Model new processes before they are implemented

The Function Hierarchy Diagrammer allows you to create hierarchies of all the functions that are performed by a business, and to identify which parts of the business can be automated. The Function Hierarchy Diagrammer is used to:

- Decompose business functions
- Define elementary business functions
- Show how functions use data

The Entity Relationship Diagrammer is a modeling tool used for defining the information needs of a business as an entity relationship model. Entity Relationship modeling involves identifying things of importance in an organization (entities), the properties of those things (attributes) and how they are related to one another (relationships). The Designer/2000 Entity Relationship Diagrammer provides:

- A diagramming tool for creating entity relationship diagrams
- Access to a multi-user Repository for creating and maintaining definitions of entities and relationships
- Access to the Database Design Transformer, which automates some of the tasks of system development by deriving a default database design from entity relationship diagrams
- Autolayout facilities for automating the improvement of the diagram layout
- Access to other related Designer/2000 tools, including the Repository Reports tool.





- A diagramming tool for creating dataflow diagrams
- Access to the multi-user Repository for creating and maintaining definitions of functions, dataflows, datastores and externals
- Access to the Application Design Transformer to derive a potential database design and customize this to achieve consistent and manageable applications
- Autolayout facilities
- Access to other related Designer/2000 tools

The **Design Editor** is part of the Designer/2000 toolset. It provides a fully integrated environment to:

- Design and generate Oracle and non-Oracle databases, including generation of the Server Application Programming Interface (API)
- Design and generate client applications (Forms and Reports)

Capture design of existing server systems and client applications

The Repository Administration Utility is a tool that enables the owner of the Repository to install and manage a Repository environment. This utility can be used to:

- Install a new Repository
- Upgrade an existing Repository
- Display information about the Repository contents
- Recreate invalid Repository objects
- Back up and restore a Repository
- Maintain users' access to the Repository
- Edit or extend the structure of the Repository by means of the user extensibility features

The Repository Administration Utility is available only to the person who administers the Repository. Otherwise know as the owner.

The Matrix Diagrammer is a general purpose crossreferencing tool that can be used to support project scoping impact analysis, network planning and quality control. A matrix diagram consists of two (sometimes three) axes, each displaying a different element type, and intersection cells, which indicate whether a relationship exists. Typically, an intersection element shows how one element uses or applies to another. The Matrix Diagrammer provides:

- Facilities for cross-referencing elements in the Repository
- The ability to view and update elements held in the Repository
- The ability to create new elements in the Repository
- Settings to control the appearance of the matrix (such as font and justification)
- Setting for filtering and automatically ordering elements on a matrix
- The ability to work with user-extended element definitions

For information or assistance on using Oracle Applications, contact the Systems Support Bureau: Barry Fox at 444-5895, ZIP! or e-mail at bfox@state.mt.us; Steven St. John at 444-2910, ZIP! or e-mail at sstjohn@state.mt.us; Tony Noble at 444-2922, ZIP! or e-mail at tnoble@state.mt.us.

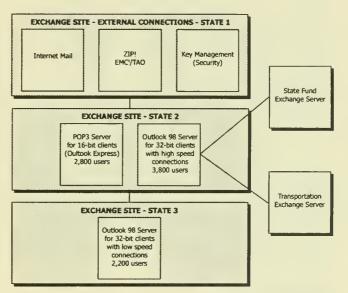
E-mail Project Update

Design

The E-Mail Implementation Team has developed a final design for the Exchange/Outlook e-mail system.

- All servers will be located in Helena, the majority in the raised floor area of the data center
- A separate 100 Mb Ethernet ring interconnecting all the Exchange boxes will be established in the data center to keep traffic (backup, directory replication, utilities, etc.) segregated from other network traffic

The architecture for Exchange will consist of three sites (see diagram):



State 1: These machines will handle all external connections – Internet mail, legacy ZIP! and TAO users, and the key management server which handles security

State 2: One box will be the POP3 server for 16-bit client users. The 16-bit client product will be Outlook Express, a "light" version of Outlook with no calendar function.

The State 2 site will also contain a DEC Alpha server which will be the primary Exchange server. Users all over the state that are 32-bit ready, come to Helena with a high speed connection, and that are in offices with over 40 staff will attach to this server. This includes agencies in Helena on the fiber backbone or connected with Transparent LAN Services.

State 3: This machine will serve 32-bit clients with slower line speeds and smaller number of staff.

Continued next page

In addition to the computers in the data center, computers will be located in the State Fund and Transportation buildings in Helena.

State Fund will house an Exchange server for their user mailboxes. This server will come into State 2 in the data center.

Transportation will house a DEC Alpha Exchange server for their user mailboxes. The machine will also be used for disaster recovery and backup purposes.

Pilot Projects

The Team has identified a variety of pilot sites to ensure all scenarios are tested prior to statewide deployment.

Aug 24, 1998	Information Services Division and State Fund
Sept 8, 1998	Public Service Commission
Sept 14, 1998	Office of Public Instruction
Sept 21, 1998	Military Affairs
Sept 28, 1998	Agriculture Helena office
Oct 5, 1998	Agriculture out of town offices,
	Billings, Great Falls, and Bozeman

Logistics team members have met with each pilot agency to prepare them for a successful migration. Pilot agencies are being asked for feedback on problems and/ or improvements to the migration procedures.

The team anticipates that production deployment will begin in mid-October.

Training

Training for pilot agencies is underway. The College of Technology is planning on having three instructors up to speed on Outlook.

ISD has a complete library of CD and video self-study training available on Outlook as well. It is suggested the self-study materials be used by remote offices, by those unable to attend regular instructor-led training, or by those needing supplemental instruction. Please refer to the article on Media Based Training for course descriptions and check out options.

For more information on the Exchange e-mail implementation project, please contact Wendy Wheeler of the Policy Development & Customer Relations Bureau at 444-2856, ZIP! or e-mail at wwheeler@state.mt.us.

Outlook 98 The Rollout Begins...

The Outlook 98 Pilot phase has begun and the following agencies are now in the process of being converted: State Fund, Department of Administration/Information Services Division, Public Service Commission, Office of Public Instruction, Military Affairs and Agriculture.

ZIP!Office users will notice some differences in mail received from users on Outlook. Although they appear as any other item in the ZIP! intray, when you open the message, it will say it is an attachment. However, the message is displayed directly under the Header information (TO:, FROM:, etc.).

Calendaring is not automated between the two systems. You can select Outlook users for meetings but you won't be able to check for Conflicts or utilize the "Find Time" feature. They will receive your meeting notice as a mail message and they will have to manually enter the appointment to their Outlook calendar. The same scenario holds true for an Outlook user scheduling a ZIP! Office user.

Be aware that when sending items using the Blind Carbon Copy option, Outlook displays ALL recipients of the mail item. Outlook users will be able to see whom you have selected as Blind

Carbon Copy recipients. Using Blind Carbon Copy in Outlook works correctly when sent to ZIP!Office users. We hope to have this problem resolved in the near future.

During the pilot phase of the Outlook rollout we expect more issues to arise but will keep e-mail users notified of them. If you have any questions or concerns regarding the migration to Outlook 98, please contact Sue Skuletich of End User Systems Support at 444-1392, ZIP! or e-mail at sskuletich@state.mt.us.

PowerPoint Made Easy!

Choosing a Room

While choosing a room may sound like an easy task, it often can mean the difference between success and failure of your presentation.

Size. If you go into a large room and there are only a few participants, you would assume there wasn't much interest in the presentation. Most people fill up the back of the room first, putting the speaker out of touch. If the room is too small, the participants might feel claustrophobic. If the room size is out of your control, you might use dividers or drapes to foreshorten the room. You can also remove chairs from the back.

Arrangement. A semicircle around the speaker is less formal than straight rows of chairs.

Tables. If the audience is taking notes, tables are better than writing on your lap.

Screen and Speaker location. Ideally the speaker would be on the audience's left at the front and the screen in the center. Americans read left to right and this arrangement offers comfortable and familiar movement between the speaker and the screen. A small spotlight over the speaker is a nice touch, especially if the room is dark.

PowerPoint's Draw Functions

The Draw functions of PowerPoint are now very powerful. While the other functions (Org Charts, Tables etc.) make the usual tasks a breeze, there will come a time in your creation of presentations that you will have to insert something that the other functions will not

accommodate. This month we'll explore how you can easily create those out of the ordinary pieces of artwork.

If you've saved the presentation we've created in the last several months, open it or a new presentation and then open a blank slide.

In the figure to the right, the lower area of the screen is highlighted. The artwork comes from the WordArt function located as an icon in the middle of this highlighted bar. It

looks like a drop shadowed "A" that is rotated 45 degrees. Click on the icon.

- Double click on any item in the WordArt Gallery
- With the Edit WordArt Text menu up, type in "Voice Mail" and OK.
- In the figure, I've placed a box around one of the "handles". These allow you to resize the artwork. Select the artwork by clicking on it then click and drag any corner handle to enlarge the art. Corner handles resize the art proportionately if you hold down the shift key. This is called "constrain". Top, bottom and side handles resize in one direction only. After trying all the handles, resize the artwork to approximately 1x3 inches.
- With the art selected, click on the rotate function. Notice the handles are now round. Click and drag to rotate. Hold down the Shift key, the Ctrl key, and then both together as you click and drag to constrain.
- Click on AutoShapes, select Basic Shapes and choose one. Now click and drag to size. Again, holding down the Shift and/or Ctrl keys will constrain the art.
- Click on the arrow next to the Fill Color icon (paint bucket), Fill Effects and Two Color and OK.
- Select the rectangle on the bar, click and drag to size, select the 3-D function at the right end of the bar, select an effect. Select the 3-D function again and click on 3-D settings. Use this bar to rotate the object 3-Dimensionally, assign a light source or texture. Explore this menu and the previous Fill Effects function.
- Select the three objects and then choose Draw at the left end of the bar. Use the Align and Distribute features to easily move objects. Then explore the Group

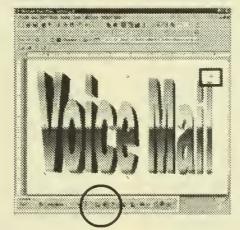
and Order functions. (You will need to have one object on top of another and Ungrouped to see how the Order works).

Use some of the other functions of this bar to create drop shadows on objects, change the size, color and shape of a line and many other things.

Next month we'll work on inserting clipart, pictures, and sound into your presentation.

For more information about this oper Badovinac of the Policy, Devel-

article contact Trapper Badovinac of the Policy, Development & Customer Relations Bureau at 444-4917, ZIP! or e-mail at tbadovinac@state.mt.us. For user support, contact the Customer Support Center at 444-2000.



Microsoft Excel

Attach Custom Toolbars to Workbooks and Templates

Custom toolbars are a great way to provide users with interface solutions to challenges they encounter in Microsoft Excel. Custom toolbars are stored as part of the Excel workspace on the computer on which they were created. To make custom toolbars available in workbooks or templates that you want to distribute to other users, you must attach the toolbars to the workbooks or templates that you plan to distribute. If you subsequently make changes to an attached toolbar, such as adding or removing command buttons, you must detach the toolbar, make your changes, and then reattach it.

Overview of Custom Toolbars

When you create and attach a custom toolbar, it exists in two places. For instance, if you create a toolbar named "myToolbar" and attach it to a workbook named "myWorkbook.xls," myToolbar exists both in the default Excel workspace and in myWorkbook. If you close myWorkbook, myToolbar will still appear on-screen as part of the Excel workspace.

Will two copies of myToolbar show up the next time you open myWorkbook? The answer is no. If there is more than one copy of a given custom toolbar, with a given name, the copy that's part of the default Excel workspace will be the only one displayed on-screen, even if the copies are different in composition.

Consider this scenario: my Workbook is open and myToolbar appears on it. You proceed to add a toolbar button to myToolbar and then save myWorkbook to disk and close it. If you then delete myToolbar and reopen myWorkbook, the version of myToolbar that appears on-screen will not include the toolbar button you just added. This is because the copy of myToolbar that you deleted is the one that belonged to the default Excel workspace and not to the myWorkbook workbook.

This can be a bit confusing until you've had a chance to experiment with creating and attaching a custom toolbar for yourself. The following procedure should help clarify.

Use the following steps to create a custom toolbar in Excel and then attach it to a specified workbook.

- 1. In Excel, click Customize on the Tools menu.
- On the Toolbars tab, click New. In the Toolbar name box in the New Toolbar dialog box, type Attach Tools, and then click OK.

- 3. In the Customize dialog box, click the Commands tab.
- 4. In the Categories box, click File. Drag a New toolbar button from the Commands box to the Attach Tools toolbar, and then do the same with the Open toolbar button. The Attach Tools command bar should now look like this graphic.
- 5. Click the Toolbars tab, then the Attach button.
- In the Custom toolbars box, click Attach Tools, and then click the Copy button. Close both the Attach Toolbars and Customize dialog boxes.
- 7. On the File menu, click Save As. In the Save as type box, click Template *.xlt). In the File name box, type AddTools, and then click Save. (Note: The default location for Excel templates is C:\ ProgramFiles\MicrosoftOffice\Office\Templates.)
- 8. On the Tools menu, click Customize On the Toolbars tab, select the Attach Tools check box in the Toolbars box, and then click Delete
- 9. Close the **Customize** dialog box, and then close the workbook.

Add another custom toolbar button

In this procedure, you'll open a workbook based on the template you created previously. Then you'll add another toolbar button to the custom toolbar you created.

- On the File menu, click New, and then double-click AttachTools.xlt on the General tab in the New dialog box.
- 2. On the Tools menu, click Customize Add the Save toolbar button to the Attach Tools toolbar by following the instructions given in step 4 of the preceding exercise.

 The Attach Tools toolbar should now look like this graphic.
- 3. Save the template as AttachTools.xlt to overwrite the existing copy, using the instructions given in step 7.
- 4. Delete the **Attach Tools** toolbar by using the instructions given in step 8. Close the workbook.
- 6. Open a workbook based on the AttachTools.xlt template, using the instructions given in step I.

For more questions about this article contact Jerry Kozak of End User Systems Support at 444-2907, ZIP! or e-mail at jkozak@state.mt.us. For help with Excel, call the ISD Customer Support Center at 444-2000.

Windows 95 - COOL TIP

Accessing Drive Space Information

s you probably know, you can right-click on any drive icon in Win95's My Computer window, select Properties from the context menu, and see a graphical display of the used and free space on that disk. However, if you have multiple disk drives, performing this operation on each one can be time consuming. Fortunately, Win95 can display the same information about all your disk drives in one tabbed properties sheet.

Open My Computer.

- Select the disk drives you wish to view in the window.
 To Select Individual Drives to View:
- Hold down the Ctrl key and click each drive you wish to view and release the Control key.

To Select a Series of Drives to View:

- Click on the first drive in the series you wish to view.
 Hold down the Shift key and click on the last drive in the series.
- Right-click on any of the highlighted drives, and select Properties from the context menu.

This technique can be used with network drives, removable disk drives, and floppy disk drives as well.

For more information on this article, contact Heidi Mann of End User Systems Support at 444-2791 or e-mail at hmann@state.mt.us. For questions regarding Microsoft Window 95, please contact your agency support staff, or the ISD Customer Support Center at 444-2000.

A Fast Goodbye to Find Fast

Ithough in theory Find Fast is a great feature, in practice it hasn't proved all that great. Find Fast periodically scans your hard disk to keep an index of all the files. Then you can find a file or folder faster because you're using that index.

The problem with Find Fast is that it periodically takes over your hard disk to perform its scan. While this occurs, whatever you're doing can become painfully slow.

If you'd like to try your system without Find Fast, you don't have to make any drastic moves; all you have to do is move the file out of the Startup folder. Right-click Start and choose Open. When the Start Menu window opens, double-click Programs. Now locate StartUp and double-click its icon. Grab the Find Fast icon with the mouse and drag it into the Programs folder for safe-keeping.

Restart Windows now and see what you think about your search speeds for a while. If the searches seem sluggish (and you don't mind the occasional slowdown when Find Fast is running), you can move Find Fast back into the StartUp folder.

This article was taken from *Tipworld* at http://www.tipworld.com. If you have any questions or would like some help on anything in this article please contact Brian Clark of End User System Support at 444-0751, ZIP!, or e-mail at brianc@state.mt.us.



Microsoft Word - Don't Have A Fit, Have an Autofit

ou've just finished creating a table in Word, and as much as you hate to admit it, it's an unspeakable mess. In some columns, long labels are wrapping to second and third lines; in others, short labels leave big, gaping spaces in their too-large cells.

How can you whip this disaster into shape? Scroll through each column, find the longest label or number in each, and adjust the width of each column. Or click a single button and let Word 97 handle it for you:

- 1. Select the entire table.
- 2. Choose Table + Cell Height and Width.
- 3. If necessary, click the Column tab.
- 4. Click the AutoFit button and then click OK.

AutoFit automatically adjusts the width of each column to accommodate the long label without wrapping.

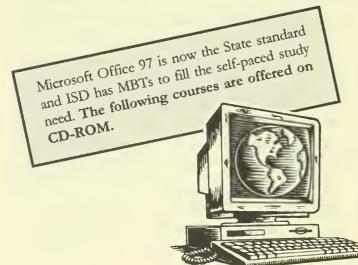
This article is reprinted from *Dummies Daily* (dummiesdaily@dummiesdaily.com), which is a member of the *PC World Online Network*.

For more information concerning this article, contact Irvin Vavruska of End User Systems Support at 444-6870, ZIP!, or e-mail at ivavruska@state.mt.us. For questions about Word, please contact your agency support staff, Word's Help Feature, or the ISD Customer Support Center at 444-2000.

Media Based Training (MBT)

As Information Technology professionals we need to keep pace with the ever changing IT industry. Advances in technology are coming at us with an ever-increasing speed. Magazine articles may alert us to the change but the concrete information is harder to come by. Self paced training becomes a very valuable resource and it's available now.

- A VCR is needed. Most of the courses are delivered on video, but some are multi-media on CD ROM. The information is presented in a very professional manner using various teaching methods including diagrams and real life examples. The accompanying workbook provides the course in written form and after each section quizzes you on what has been covered.
- Sign up. Contact Trapper Badovinac or Diana MacDonald via ZIP! to request a course. They will need your name, phone number and Agency.
- Pickup. You can pick up the course in Room 222 of the Mitchell Building or it can be deadheaded to you.
- How Long? The checkout period for each course is two weeks.
- What's Available? The course description of each course can be found on the VAS at guest\training\CT_Video\T3_VAS.rtf. If you are an Approach user you can check on the current availability of any course by accessing the read-only file on the VAS at guest\training\CT_Video \videodb.apr (password Montana).
- How Much? There is no charge.



10.01.01 Access 97, Part 1 10.01.02 Access 97, Part 2

This course is a two part series which will cover the skills necessary for the Expert User certification exam.

Prerequisites: A basic understanding of Windows 95

Course Duration: 6 hours for both parts

10.02.01 Excel 97, Expert User

This multimedia self-paced learning course will instruct you on working with the advanced features and functions of Microsoft Excel 97.*

Prerequisites: 10.02.02 Proficient User

10.02.02 Excel 97, Proficient User

This self-paced learning course will instruct you on working with Microsoft Excel 97.*

Prerequisites: Knowledge of spreadsheets or earlier versions of Excel.

10.03.01 Outlook 97, Part 1 10.03.02 Outlook 97, Part 2

This course is a two part series which will cover the skills necessary for the Expert User certification exam. *

Prerequisites: A basic understanding of Windows 95

Course Duration: 4-6 hours for both parts

10.03.03A Outlook 97, E-mailing 10.03.03B Outlook 97 (Second license/identical copy)

Discussing the Outlook bar, examining Outlook & mail groups, using mail shortcuts/folders, the folder banner, sending a message, including an attachment, receiving mail options, opening a message, viewing an attachment, replying to a message, deleting a message, creating storage folders, moving/copying files to folders, sorting messages, grouping messages, using autosignature, discussing the autoname check feature, showing autopreview, defining message handling options, using the voting feature, examining the recalling feature, flagging a message, using message tracking, viewing tracking results

Prerequisites: A basic understanding of Windows 95

10.03.04A Outlook 97, Scheduling 10.03.04B Outlook 97 (Second license/identical copy)

Examining the Outlook window, discussing the Outlook bar, using the date navigator, examining the current view list, scheduling a new appointment, setting reminders, designating recurring appointments, inserting a new task into the taskpad list, making tasks complete, inserting a recurring task, copying a task, using filters, working with groups, sorting the taskpad list, inserting a new and an annual event, adding a contact, grouping & sorting the contact list, working with the meeting planner, scheduling a meeting, sending meeting requests, printing an outlook file, changing default settings

Prerequisites: A basic understanding of Windows 95

10.04.01 PowerPoint 97

This self-paced learning course will instruct you on working with Microsoft PowerPoint 97.*

Course Duration: 6-8 hours

Prerequisites: A basic understanding of Windows 95

10.05.01 Word 97, Proficient User

This self-paced learning course will instruct you on working with Microsoft Word 97. This course is geared towards a new word processing user or a person familiar with Word, but not this version.

Course Duration: 6-8 hours

Prerequisites: A basic understanding of Windows 95

10.05.02 Word 97, Expert User

This self-paced learning course will instruct you on working with the advanced features of Microsoft Word 97. Experienced Microsoft Word users who wish to leverage Word's more advanced features and options. This course assumes a basic understanding of Word 97.

Course Duration: 6-8 hours

Prerequisites: 10.05.01 Word 97 Proficient User

The minimum requirements for the above courses: IBM 486 33 MHz PC or compatible; VGA color monitor with 512 VRAM running in 640x480 resolution; 8MB RAM; 2x speed CD-ROM ~25MB hard disk space per topic; Windows 3.1, Win95 or NT; MS Mouse or compatible.

10.06.01 E-mail Essentials

Legal and appropriate use of e-mail is a video program that will introduce you to the complex array of legal and interpersonal issues that arise from the use of one of the fastest growing and most powerful communications tools ever. This course utilizes short dramatizations to explore various issues that are common within organizations. It can also be used for small group training.

Minimum Requirements: VCR

Course Duration: 29 minutes

Prerequisites: none

10.07.01 Office 97

This tutorial creates a true to life emulation of the product itself. The student can follow a standard training path, or go straight to specific topics via an indexed help system. Glossaries and quizzes will help every step of the way. **Note:** This CBT autoloads the courses on to your hard drive, using ~ 25 MB per topic. You can remove them after you have completed the courses but it will tie up a substantial amount of storage space while installed.

Includes Word 97, PowerPoint 97, Outlook 97, Windows 95, Excel 97

Course Duration: 3-4 hours each

Minimum Requirements: IBM 386 PC or compatible; VGA color monitor; 4MB RAM; ~25MB hard disk space per topic; Windows 3.1; MS Mouse or compatible.

*The unique Skill Builder instruction uses simulation, questioning, practice, quizzes and multiple study paths to create a learning environment that enhances your enjoyment and comprehension. Preassessment testing in the beginning of each unit will allow you to have a personalized study path based on the knowledge and skills demonstrated. Mastery tests at the end of each unit allow you to verify your understanding of key skills and guide you back to any content that warrants further study.

For more information contact Trapper Badovinac of the Policy, Development & Customer Relations Bureau at 444-4917, ZIP! or e-mail at tbadovinac@state.mt.us.

Oracle Channel Training ...

The Oracle Channel Satellite education program is available to state agency staff through the ISD Data Network Connectivity fee. These broadcasts are held from 9:45 am to 2 pm in the Department of Transportation Information Services Bureau conference room (basement).

September

- 1 SQL 1: Retrieve Data
- 2 SQL ll: Define and Manipulate Data
- 3 SQL Statement Tuning
- 15 Oracle8 Architecture and Startup
- 16 Oracle8 Architecture and Startup
- 17 Plan for Effective Data Warehouse Implementation NEW
- 22 Developer/2000 Fundamentals
- 23 Developer/2000 Tuning
- 24 Developer/2000 Deploy Web-based Applications
- 29 Financial Applications Release 11 New Features
- 30 Manufacturing Applications Release 11 New Features

October

- 1 Introduction to Oracle Web Application Server
- 6 Oracle8 Data and Security Management
- 7 Oracle8 Backup and Recovery Strategies
- 8 Oracle8 Performance Tuning Strategies **NEW**
- 13 PL/SQL I: Coding Techniques
- 14 PL/SQL II: Database Level Application Programming
- 21 PREMIERE BROADCAST

Oracle7 Introduction to Oracle Certification Primer Oracle7 Database Administration Certification Primer

22 PREMIERE BROADCAST

Oracle7 Backup and Recovery Certification Primer Oracle7 Performance Tuning Certification Primer

- 27 Financial Applications Release 11 New Features
- 28 Manufacturing Applications Release 11New Features
- 29 Discoverer 3: Analyze Your Data Requirements

November

- 3 Introduction to Data Warehousing
- 4 Plan for Effective Data Warehouse Implementation
- 5 Data Warehousing Fundamentals for DBAs
- 10 Oracle8 Architecture and Startup
- 11 Oracle8 Architecture and Startup
- 12 Oracle8 Networking Strategies NEW
- 17 Developer/2000 Release 2 New features
- 18 Developer/2000 Tuning
- 19 Object technology Essentials

December

- Financial Applications Release 11New Features
- 2 Manufacturing Applications Release 11 New Features
- 3 Designer/2000 Release 2 New Features

A full description for the each of the classes can be found on the Oracle website at http://education.oracle.com/education/toc. Because class material has to be ordered you must register at least two weeks before the scheduled class date. Please contact Barbara Clark at 444-0846, ZIP! or e-mail at baclark@state.mt.us.



End Users Computer Security Training

This is a two-hour seminar that covers the following:

- network security
- laws, rules, and policies
- login IDs and passwords
- viruses, hoaxes, and chain letters
- proper use of e-mail and the Internet
- user responsibilities

This training is held the third Thursday of each month from 8:30-10:30am in room 13 of the Mitchell Building.

Date: Thurs, Sept 17
Time: 8:30–10:30 am
Location: Rm. 13, Mitchell

For registration or more information, please contact Lois Lebahn (llebahn@state.mt.us) or Kim LaRowe (klarowe@state.mt.us) of ISD at 444-2700.

Training Calendar

Schedule assembled by the Helena College of Technology of the University of Montana. If you have any questions about enrollment, please call 406-444-6821. All classes will be held at the Helena College of Technology at 1115 N. Roberts.

The Helena College of Technology will make reasonable accommodations for any disability that may interfere with a person's ability to participate in training.

Persons needing an accommodation must notify the college no later than two weeks before the date of training to allow adequate time to make needed arrangements. To make your request known, call 444-6821.

To enroll in a class, you must send or deadhead an enrollment application to

State Training Center, HCT Helena, MT 59601 If you have questions about enrollment, please call 444-6821.

Once you enroll in a class, the full fee will be charged UNLESS you cancel at least three business days before the first day of class. HCT is also willing to schedule specific classes by request from state agencies.



State Training Calendar

Database Classes	PREREQ	DATE	COST	DAYS
Intro. to Oracle	Intro to Windows	Oct 5-8 am	200.00	2
Intro. to SQL	Intro to Oracle	Oct 19-22 am	200.00	2
Oracle Developer 2000, part I	Intro to Oracle & SQL	Oct 28-30, Nov 4-6 am	**342.20	3
PL/SQL	Intro to Oracle & SQL	Nov 9, 10, 12, 13 am	200.00	2
Oracle Developer 2000, part II	Oracle Dev. I & PL/SQL	Nov 18-25 am	**300.00	3
Oracle Designer	Oracle Dev. I; PL/SQL	Sept 14-25 am	**536.95	5
Access 97	Windows 95	Oct 7-8, Nov 30-Dec 1	200.00	2
Visual Basic for Applications	(VBA) for Access 97	Oct 14-15	200.00	2
Data Network/Mainfrar	ne Classes			
Seagate Backup Exec	N/A	Sept 22-23, 24-25	~125.00	2
Microcomputer Classes				
Windows 95 Conversion	familiar w/Windows	Sept 2 am, Oct 5 am, Nov 4 pm	50.00	1/2
Windows 95	N/A	Sept 1, Oct 1, Nov 2	100.00	1
Zip!Office	N/A	Sept 11 am	FREE	1/3
WordPerfect 6.1 for Windows	Windows 3.1 or 95	Nov 12	100.00	1
Word 97 Conversion	Windows 95	Sept 10, 25 am, Oct 5, Nov 10 pm	50.00	1/2
Word 97 for Light Users	Windows 95	Sept 9, Oct 9, Nov 24	100.00	1
Word 97	Windows 95	Sept 29-30, Oct 21-22, Nov 17-18	200.00	2
Macros for Word	Any Word 97 course	Oct 27 am, Nov 24 pm	50.00	1/2
Lotus for Windows	Windows 3.1 or 95	Nov 20	100.00	1
Excel 97 Conversion	Windows 95	Sept 10 pm, Oct 6 am, Nov 9 pm	50.00	1/2
Excel 97 for Light Users	Windows 95	Sept 14, 30, Oct 16, Nov 13	100.00	1
Excel 97	Windows 95	Sept 17-18, Oct 19-20, Nov 9-10	200.00	2
Macros for Excel	Any Excel 97 course	Oct 29 am, Nov 17 am	50.00	1/2
Advanced Excel 97	Conv. Excel 97 or Excel 9	7 Sept 28, Oct 28, Nov 19	100.00	1
PowerPoint 97	Windows 95	Sept 15-16, Oct 14-15	200.00	2
Internet	Windows 95	Nov 12 pm	50.00	1/2
HTML	Win 95, Internet exp.	Nov 16-19 pm	200.00	2

Prerequisites may be met with consent of Instructor.

^{**} The Oracle Designer and Developer class fees are recovered through the monthly data network rate and paid for by ISD.

State Training Enrollment Application

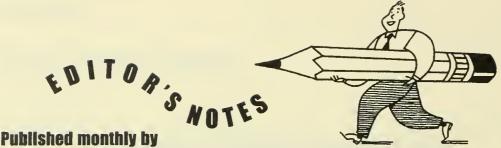
Complete IN FULL and return AT LEAST ONE WEEK prior to the first day of class.

Course Data
Course Request
Date Offered
Student Data
Name
Soc. Sec. Number (for P/P/P)
Agency & Division
Mailing Address
Phone
How have you met the required prerequisites for this course? Explain, giving the class(s) taken, tutorial completed, and/or experience.
Billing Information/Authorization Mandatory LogonID Agency# Authorized Signature
If attending Oracle Developer or Designer training, your application must also be approved by the agency IT Manager.
IT Manager
Training is needed for
Agency Oracle Developer Continuing education opportunity (Agency will be billed for training.) Agency contractor (Agency will be billed for training.)

Full class fee will be billed to registrant unless cancellation is made three business days before the start date of the class.

DeadHead completed form to

State Training Center, Helena College of Technology of the U of M Phone 444-6800 FAX 444-6892



Information Services Division (ISD) Department of Administration

Room 229, Mitchell Building, Helena, MT 59620

406-444-2700 FAX 406-444-2701

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Alternative accessible formats provided upon request.

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- www.state.mt.us/isd/current/news
- ISD's Value Added Server/guest/N&V

To Submit an Article

Send the article to Trapper Badovinac, via e-mail. The deadline for inclusion in the following month's newsletter is the 1st week of the previous month.

Printing & Distribution

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www.state.mt.us/isd/current/news

Department of Administration Information Services Division Mitchell Building, Room 229 P.O. Box 200113 Helena, MT 59620-0113

Is Your Address Correct?

If not, see "FREE Subscription" above.

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